	mber: <u>08/796/38</u>	Edited by:	Date: /2//
CI	hanged a file from non-ASCII to ASCII	Verified by:	(ST
CI	hanged the margins in cases where the sequence text was "wrapped	" down to the n	ext line
Ec	dited a format error in the Current Application Data section, specifical	ly: - A /	9/1
	dited the Current Application Data section with the actual current num oplicant was the prior application data; or other	nber. The suinst	er inputted by the
Ac	dded the mandatory heading and subheadings for "Current Applicatio	n Data"	\ 0
Εc	dited the "Number of Sequences" field. The applicant spelled out a ne	umber instead o	RECEIVE or using an integ
Cł	hanged the spelling of a mandatory field (the headings or subheading	s), specifically:	APR 0 2 199
Cc	prrected the SEQ ID NO when obviously incorrect. The sequence nu	mbers that were	MATRIX CUSTO SERVICIDADE
ns	serted or corrected a nucleic number at the end of a nucleic line. SE	Q ID NO's edite	ed:
ip	prrected subheading placement. All responses must be on the same oplicant placed a response below the subheading, this was moved to i		•
In:	serted colons after headings/subheadings. Headings edited included	i:	
	serted colons after headings/subheadings. Headings edited included eleted extra, invalid, headings used by an applicant, specifically:	f :	
De D		ecretary initials/	
De D	eleted extra, invalid, headings used by an applicant, specifically:	ecretary initials/	·
De D	eleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; sepage numbers throughout text; other invalid text, such as	ecretary initials/	·
De D	eleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; set page numbers throughout text; other invalid text, such as nserted mandatory headings, specifically:	ecretary initials/	·
De D	eleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; sepage numbers throughout text; other invalid text, such as asserted mandatory headings, specifically: corrected an obvious error in the response, specifically:	ecretary initials/	·
De De Co	eleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; set page numbers throughout text; other invalid text, such as Inserted mandatory headings, specifically: Forrected an obvious error in the response, specifically: dited identifiers where upper case is used but lower case is required,	ecretary initials/	
Del	eleted extra, invalid, headings used by an applicant, specifically: Deleted: non-ASCII "garbage" at the beginning/end of files; sel_ page numbers throughout text; other invalid text, such as asserted mandatory headings, specifically: Corrected an obvious error in the response, specifically: dited identifiers where upper case is used but lower case is required, corrected an error in the Number of Sequences field, specifically:	or vice versa. ces had to be d	eleted.

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

1.

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:05

INPUT SET: S22151.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

ENTERED 1 SEQUENCE LISTING 2 General Information: 3 (1) 4 (i) APPLICANT: Glenn Albrecht, Sydney Brenner, David H. Lloyd 5 6 7 (ii) TITLE OF INVENTION: Massively Parallel Signature Sequencing by 8 Ligation of Encoded Adaptors 9 10 (iii) NUMBER OF SEQUENCES: 11 (iv) CORRESPONDENCE ADDRESS: 12 13 (A) ADDRESSEE: Stephen C. Macevicz, Lynx Therapeutics, Inc. (B) STREET: 3832 Bay Center Place 14 15 (C) CITY: Hayward (D) STATE: California 16 17 (E) COUNTRY: USA (F) ZIP: 94545 18 19 20 (v) COMPUTER READABLE FORM: 21 (A) MEDIUM TYPE: 3.5 inch diskette RECEIVED 22 (B) COMPUTER: IBM compatible 23 (C) OPERATING SYSTEM: Windows 3.1/DOS 5.0 (D) SOFTWARE: Microsoft Word for Windows, vers. 2.0 APR 0 2'1998 24 25 26 (vi) CURRENT APPLICATION DATA: MATRIX CUSTOMER 27 (A) APPLICATION NUMBER: SERVICE CENTER 28 (B) FILING DATE: 29 (C) CLASSIFICATION: 30 31 (vii) PRIOR APPLICATION DATA: 32 (A) APPLICATION NUMBER: 08/689,587 33 (B) FILING DATE: 12-AUG-96 34 (vii) PRIOR APPLICATION DATA: 35 36 (A) APPLICATION NUMBER: 08/659,453 37 (B) FILING DATE: 06-JUN-96 38 39 (viii) ATTORNEY/AGENT INFORMATION: 40 (A) NAME: Stephen C. Macevicz 41 (B) REGISTRATION NUMBER: 30,285 42 (C) REFERENCE/DOCKET NUMBER: 808-lus 43 44 (ix) TELECOMMUNICATION INFORMATION: 45 (A) TELEPHONE: (510) 670-9365

(B) TELEFAX: (510)670-9302

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:07

```
47
48
49
    (2) INFORMATION FOR SEQ ID NO: 1:
50
    (i) SEQUENCE CHARACTERISTICS:
51
    (A) LENGTH: 28 nucleotides
52
53
    (B) TYPE: nucleic acid
    (C) STRANDEDNESS: double
54
55
    (D) TOPOLOGY: linear
56
57
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
58
    TGGATTCTAG AGAGAGAG AGAGAGAG
                                                                  28
59
60
61
62
    (2) INFORMATION FOR SEQ ID NO: 2:
63
64
    (i) SEQUENCE CHARACTERISTICS:
     (A) LENGTH: 16 nucleotides
65
    (B) TYPE: nucleic acid
66
    (C) STRANDEDNESS: double
67
68
    (D) TOPOLOGY: linear
69
70
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
71
72
    NNGGATGNNN NNNNNN
73
                                                                  16
74
75
76
    (2) INFORMATION FOR SEQ ID NO: 3:
77
78
    (i) SEQUENCE CHARACTERISTICS:
79
    (A) LENGTH: 11 nucleotides
    (B) TYPE: nucleic acid
80
    (C) STRANDEDNESS: single
81
82
    (D) TOPOLOGY: linear
83
84
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
85
86
87
    NRRGATCYNN N
                                                                  11
88
89
    (2) INFORMATION FOR SEQ ID NO: 4:
90
91
92
    (i) SEQUENCE CHARACTERISTICS:
    (A) LENGTH: 20 nucleotides
93
     (B) TYPE: nucleic acid
94
     (C) STRANDEDNESS: double
95
    (D) TOPOLOGY: linear
96
97
98
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
99
```

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:09

100 101	AGTGGCTGGG CATCGGACCG	20
102 103	(2) INFORMATION FOR SEQ ID NO: 5:	
	(i) GEOUENGE GUADAGMEDICMIGG.	
104	(i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 20 nucleotides	
106	(B) TYPE: nucleic acid	
107	(C) STRANDEDNESS: double	
108	(D) TOPOLOGY: linear	
109	(
110	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:	
111	000000000	0.0
112	GGGGCCCAGT CAGCGTCGAT	20
113	·	
114	101 THEORY TO TO TO 10 4	
115	(2) INFORMATION FOR SEQ ID NO: 6:	
116		
117	(i) SEQUENCE CHARACTERISTICS:	
	(A) LENGTH: 70 nucleotides	•
	(B) TYPE: nucleic acid	
120	(C) STRANDEDNESS: double	
121	(D) TOPOLOGY: linear	
122		
123	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:	
124		
125	AAAAGGAGGA GGCCTTGATA GAGAGGACCT GTTTAAACGT TTAAACGGAT	50
126	CCTCTTCCTC TTCCTCTTCC	70
127		
128		
129	(2) INFORMATION FOR SEQ ID NO: 7:	
130		
131	(i) SEQUENCE CHARACTERISTICS:	
132	(A) LENGTH: 34 nucleotides	
133	(B) TYPE: nucleic acid	
134	(C) STRANDEDNESS: single	
135	(D) TOPOLOGY: linear	
136		
137	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:	
138		
139	CTAAACCATT GGTATGGGCC AGTGAATTGT AATA	34
140		
141		
142	(2) INFORMATION FOR SEQ ID NO: 8:	
143		
144	(i) SEQUENCE CHARACTERISTICS:	
145	(A) LENGTH: 55 nucleotides	
146	(B) TYPE: nucleic acid	
147	(C) STRANDEDNESS: single	
148	(D) TOPOLOGY: linear	
149		
150	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:	
151	_	
152	CGCGCAGCCC GCATCGTTTA TGCTACAGAC TGTCAGTGCA	40

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:11

153	GCTCTCCGAT CCAAA	55
154	(A) THEODY HON GOD IN NO. A.	
155 156	(2) INFORMATION FOR SEQ ID NO: 9:	
156	(i) GEOVENGE GUADAGMEDIGMIGG.	
	(i) SEQUENCE CHARACTERISTICS:	
158	(A) LENGTH: 16 nucleotides	
159	(B) TYPE: nucleic acid	
160	(C) STRANDEDNESS: double	
161	(D) TOPOLOGY: linear	
162		
163	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:	
164	Machine and Committee of the Committee o	
165	TCGATGGGCT AGATTT	16
166		
167		
168	(2) INFORMATION FOR SEQ ID NO: 10:	
169		
170	(i) SEQUENCE CHARACTERISTICS:	
	(A) LENGTH: 30 nucleotides	
	(B) TYPE: nucleic acid	
173	(C) STRANDEDNESS: double	
174	(D) TOPOLOGY: linear	
175		
176	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:	
177		
178	ANNNTACAGC TGCATCCCTT GGCGCTGAGG	30
179		
180	(2) INFORMATION FOR SEQ ID NO: 11:	
.181		
182	(i) SEQUENCE CHARACTERISTICS:	
183	(A) LENGTH: 30 nucleotides	
184	(B) TYPE: nucleic acid	
185	(C) STRANDEDNESS: double	
186	(D) TOPOLOGY: linear	
187		
188	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:	
189		
190	NANNTACAGC TGCATCCCTG GGCCTGTAAG	30
191		
192		
193	(2) INFORMATION FOR SEQ ID NO: 12:	
194		
195	(i) SEQUENCE CHARACTERISTICS:	
196	(A) LENGTH: 30 nucleotides	
197	(B) TYPE: nucleic acid	
198	(C) STRANDEDNESS: double	
199	(D) TOPOLOGY: linear	
200		
201	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:	
202		
203	CNNNTACAGC TGCATCCCTT GACGGGTCTC	30
204		
205	(2) INFORMATION FOR SEQ ID NO: 13:	

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:14

		mar of Sel. 5
206 207	(i) SEQUENCE CUADACTEDISTICS.	
207	, , , =	
209	, ,	
210	• •	
	(C) STRANDEDNESS: double	
211	(D) TOPOLOGY: linear	
212	(
213	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:	
214		
215	NCNNTACAGC TGCATCCCTG CCCGCACAGT	30
216		
217	(2) INFORMATION FOR SEQ ID NO: 14:	
218		
219	(i) SEQUENCE CHARACTERISTICS:	
220	(A) LENGTH: 30 nucleotides	
	(B) TYPE: nucleic acid	
	(C) STRANDEDNESS: double	
223	(D) TOPOLOGY: linear	
224		
225	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:	
226	•	
227	GNNNTACAGC TGCATCCCTT CGCCTCGGAC	30
228		
229	(2) INFORMATION FOR SEQ ID NO: 15:	
230		
231	(i) SEQUENCE CHARACTERISTICS:	
	(A) LENGTH: 30 nucleotides	
233	(B) TYPE: nucleic acid	
234	(C) STRANDEDNESS: double	
235	(D) TOPOLOGY: linear	
236		
237	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:	
238		
239	NGNNTACAGC TGCATCCCTG ATCCGCTAGC	30
240		
241		
242	(2) INFORMATION FOR SEQ ID NO: 16:	
243		
244	(i) SEQUENCE CHARACTERISTICS:	
245	(A) LENGTH: 30 nucleotides	
246	(B) TYPE: nucleic acid	
247	(C) STRANDEDNESS: double	
248	(D) TOPOLOGY: linear	
249	•	
250	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:	
251		
252	TNNNTACAGC TGCATCCCTT CCGAACCCGC	30
253		
254	(2) INFORMATION FOR SEQ ID NO: 17:	
255	/-/	
256	(i) SEOUENCE CHARACTERISTICS:	
257	(A) LENGTH: 30 nucleotides	
258	(B) TYPE: nucleic acid	
230	(D) IIID. HUCTEIC GCIG	

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946, 138

DATE: 12/17/97 TIME: 17:00:17

INPUT SET: S22151.raw

***** PREVIOUSLY ERRORED SEQUENCES - EDITED *****

115	(2) INFORMATION FOR SEQ ID NO: 6:	
116		
117	(i) SEQUENCE CHARACTERISTICS:	
718	(A) LENGTH: 70 nucleotides	
119	(B) TYPE: nucleic acid	
120	(C) STRANDEDNESS: double	
121	(D) TOPOLOGY: linear	
122		
123	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:	
124		
125	AAAAGGAGGA GGCCTTGATA GAGAGGACCT GTTTAAACGT TTAAACGGAT	50
126	CCTCTTCCTC TTCCTCTTCC	70
127		
128		

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 17:00:17

INPUT SET: S22151.raw

Line

Error

Original Text

44

45

(A) TELEPHONE: (510) 670-9365

(B) TELEFAX: (510)670-9302

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 14:23:22

INPUT SET: S22151.raw

This Raw Listing contains the General **Information Section and those Sequences** containing ERRORS.

Does Not Comply

Corrected Diskette Needed 1 SEQUENCE LISTING 2 3 General Information: (1) 4 (i) APPLICANT: Glenn Albrecht, Sydney Brenner, David H. Lloyd 5 6 7 (ii) TITLE OF INVENTION: Massively Parallel Signature Sequencing by Ligation of En 8 9 (iii) NUMBER OF SEQUENCES: 28 10 11 (iv) CORRESPONDENCE ADDRESS: 12 (A) ADDRESSEE: Stephen C. Macevicz, Lynx Therapeutics, Inc. 13 (B) STREET: 3832 Bay Center Place 14 (C) CITY: Hayward 15 (D) STATE: California (E) COUNTRY: USA 16 17 (F) ZIP: 94545 18 19 (v) COMPUTER READABLE FORM: (A) MEDIUM TYPE: 3.5 inch diskette 20 (B) COMPUTER: IBM compatible 21 22 (C) OPERATING SYSTEM: Windows 3.1/DOS 5.0 23 (D) SOFTWARE: Microsoft Word for Windows, vers. 2.0 24 25 (vi) CURRENT APPLICATION DATA: (A) APPLICATION NUMBER: 26 (B) FILING DATE: 27 28 (C) CLASSIFICATION: 29 30 (vii) PRIOR APPLICATION DATA: (A) APPLICATION NUMBER: 08/689,587 31 32 (B) FILING DATE: 12-AUG-96 33 34 (vii) PRIOR APPLICATION DATA: 35 (A) APPLICATION NUMBER: 08/659,453 36 (B) FILING DATE: 06-JUN-96 37 38 (viii) ATTORNEY/AGENT INFORMATION: 39 (A) NAME: Stephen C. Macevicz 40 (B) REGISTRATION NUMBER: 30,285 (C) REFERENCE/DOCKET NUMBER: 808-lus 41 42 (ix) TELECOMMUNICATION INFORMATION: 43

RAW SEQUENCE LISTING PATENT APPLICATION US/08/946,138

DATE: 12/17/97 TIME: 14:23:24

INPUT SET: S22151.raw

46 47

ERRORED SEQUENCES FOLLOW:

	114	(2) INFORMATION FOR SEQ ID NO: 6:	
	115		
	116	(i) SEQUENCE CHARACTERISTICS:	
>	117	(A) LENGTH: 70 nucleotides	
	118	(B) TYPE: nucleic acid	
	119	(C) STRANDEDNESS: double	4
	120	(D) TOPOLOGY: linear	land
	121		Largue
	122	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:	
	123		V
	124	AAAAGGAGGA GGCCTTGATA GAGAGGACCT GTTTAAACGT TTAAACGGAT	50 CCTCTTCCTC TTCCTCTTCC
	125		
	126		

SEQUENCE VERIFICATION REPORT PATENT APPLICATION *US/08/946,138*

DATE: 12/17/97 TIME: 14:23:26

INPUT SET: S22151.raw

Line

Error

Original Text

117

Entered (70) and Calc. Seq. Length (0) differ

(A) LENGTH: 70 nucleotides